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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,871	08/06/2001	Kwok Pun Cheung	609920600018	8511

24325 7590 02/26/2003

Jones, Day, Reavis and Pogue
North Point
901 Lakeside Avenue
Cleveland, OH 44114

EXAMINER

NGUYEN, DINH Q

ART UNIT	PAPER NUMBER
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3752

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/922,871

Applicant(s)

CHEUNG, KWOK PUN

Examiner

Dinh Q Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 15-25 is/are pending in the application.
- 4a) Of the above claim(s) 7, 20 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 15-19 and 22-25 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6, 7, 8. 6) ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

1. Claims 7, 20, and 21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 10.

Claim Objections

2. Claims 1 and 15 are objected to because of the following informalities: in claim 1, line 5, "the air above the ground" should read --air above the ground--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 6, 15, 16, 22, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Rust.

Rust discloses a container of liquid 11 is configured to suspend from an aircraft 14 flying over a target area 10, an outlet 38 through which a gravitational flow of fluid is dropped, a diffuser 15'-18' to diffuse the gravitational flow of the liquid 15-18 exiting the container 11 outlet horizontally outward beyond the container 11 into the air above the

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target area 10 and over a corresponding wide area (figure 1), diffuser inlet (not numbered) and diffuser outlets 15'-18', and a manifold 23.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 24, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rust in view of Rainey et al.

Rust teaches all the limitations of the claims except for flexible hydraulic lines. However, Rainey discloses a container 33 suspending from an aircraft 35 with a flexible hydraulic 43 extending from the container 33. Therefore, it would have been obvious to one having ordinary skill in the art to have provided the device of Rust with flexible hydraulic lines as suggested by Rainey. Doing so would provide a way to dispense liquid.

7. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rust in view of Nance.

Rust teaches all the limitations of the claims except for a plurality of circular diffusing areas that overlaps each other. However, Nance discloses an aircraft 6 with a container 14 having a diffuser configured to diffuse liquid over a plurality of circular areas that overlaps each other (figure 1). Therefore, it would have been obvious to one

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having ordinary skill in the art to have provided the device of Rust with a plurality of circular diffusing areas that overlaps each other as suggested by Nance. Doing so would provide an effective spraying device.

Allowable Subject Matter

8. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to show the art with respect to an aircraft with a suspending container: Morgan, Andrews, Hubbard, and Barlow et al.

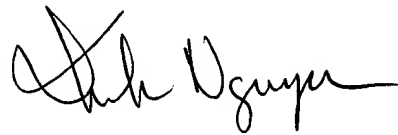
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh Q Nguyen whose telephone number is (703) 305-0248. The examiner can normally be reached on Monday-Friday 6:30-4:00 alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (703) 308-2087. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

dqn
February 21, 2003

A handwritten signature in black ink, appearing to read "Dinh Nguyen". The signature is fluid and cursive, with the first name "Dinh" and last name "Nguyen" clearly distinguishable.

Dinh Nguyen

Patent Examiner